

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A method for preparing a functionalized polymer, the method comprising:

contacting an anionically-polymerized living polymer with an isocyanato alkoxy silane or isothiocyanato alkoxy silane.

2. (Previously Presented) The method of claim 1, where the anionically-polymerized polymer is prepared from monomer selected from the group consisting of 1,3-butadiene, isoprene, 1,3-pentadiene, 2,3-dimethyl-1,3-butadiene, 1,3-hexadiene, myrcene, styrene, α -methyl styrene, *p*-methylstyrene, and vinyl naphthalene.

3. (Original) The method of claim 1, where the anionically-polymerized polymer is a copolymer of styrene and 1,3-butadiene.

4. (Previously Presented) The method of claim 2, where the anionically-polymerized polymer is formed by using an initiator comprising at least one element from Group 1 or Group 2 of the Periodic Table.

5. (Original) The method of claim 1, where the anionically-polymerized polymer is contacted with from about 0.3 to about 1 equivalent of terminating agent per equivalent of initiator.
6. (Previously Presented) The method of claim 1, where the initiator includes a lithium-containing initiator.
7. (Original) The method of claim 3, where the anionically-polymerized polymer is formed by using a lithium-containing initiator in the presence of a polar coordinator.
8. (Original) The method of claim 7, where the anionically-polymerized polymer includes from about 10 to about 50 percent *mer* units deriving from styrene, and where from about 8 to about 99 percent of the *mer* units deriving from 1,3-butadiene are in the 1,2-vinyl microstructure.
9. (Original) The method of claim 8, where the anionically-polymerized polymer includes from about 18 to about 40 percent *mer* units deriving from styrene, and where from about 10 to about 60 percent of the *mer* units deriving from 1,3-butadiene are in the 1,2-vinyl microstructure.

10. (Original) The method of claim 9, where the remaining *mer* units deriving from 1,3-butadiene are in the 1,4-cis microstructure or the 1,4-trans microstructure at a relative ratio of about 3 cis-units to about 5 trans-units.

11. (Previously Presented) The method of claim 1, where the isocyanato alkoxysilane compound or isothiocyanato alkoxysilane compound is selected from the group consisting of gamma-isocyanatopropyl-triethoxysilane, gamma-isothiocyanatopropyl-triethoxysilane, gamma-isocyanatopropyl-trimethoxysilane, and gamma-isothiocyanatopropyl-trimethoxysilane.

12. (Original) The method of claim 1, where the isocyanato alkoxysilane comprises gamma-isocyanatopropyl-trimethoxysilane.

13.-20. (Cancelled)

21. (Previously Presented) A method for preparing a functionalized polymer, the method comprising:

polymerizing conjugated diene monomer, optionally together with monomer copolymerizable therewith, by initiating the polymerization with a lithium-containing compound to thereby form an anionically-polymerized living polymer; and

terminating the living polymer with an isocyanato alkoxysilane or isothiocyanato alkoxysilane.

22. (Previously Presented) The method of claim 21, where the conjugated diene monomer is selected from the group consisting of 1,3-butadiene, isoprene, 1,3-pentadiene, 2,3-dimethyl-1,3-butadiene, and 1,3-hexadiene.

23. (Previously Presented) The method of claim 21, where the anionically-polymerized polymer is a copolymer of styrene and 1,3-butadiene.

24. (Previously Presented) The method of claim 21, where the anionically-polymerized polymer is terminated with from about 0.3 to about 1 equivalent of isocyanato alkoxysilane or isothiocyanato alkoxysilane compound per equivalent of initiator.

25. (Previously Presented) The method of claim 23, where said step of polymerizing takes place in the presence of a polar coordinator.

26. (Previously Presented) The method of claim 25, where the anionically-polymerized polymer includes from about 10 to about 50 percent *mer* units deriving from styrene, and where from about 8 to about 99 percent of the *mer* units deriving from 1,3-butadiene are in the 1,2-vinyl microstructure.

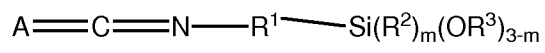
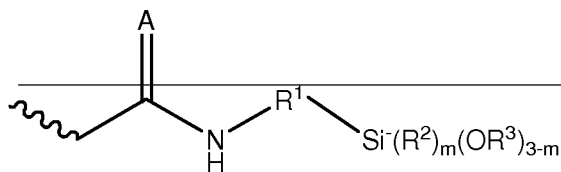
27. (Previously Presented) The method of claim 26, where the anionically-polymerized polymer includes from about 18 to about 40 percent *mer* units deriving from styrene, and where from about 10 to about 60 percent of the *mer* units deriving from 1,3-butadiene are in the 1,2-vinyl microstructure.

28. (Previously Presented) The method of claim 27, where the remaining *mer* units deriving from 1,3-butadiene are in the 1,4-cis microstructure or the 1,4-trans microstructure at a relative ratio of about 3 cis-units to about 5 trans-units.


29. (Previously Presented) The method of claim 21, where the isocyanato alkoxysilane compound or isothiocyanato alkoxysilane compound is selected from the group consisting of gamma-isocyanatopropyl-triethoxysilane, gamma-isothiocyanatopropyl-triethoxysilane, gamma-isocyanatopropyl-trimethoxysilane, and gamma-isothiocyanatopropyl-trimethoxysilane.

30. (Previously Presented) The method of claim 21, where the isocyanato alkoxysilane comprises gamma-isocyanatopropyl-trimethoxysilane.

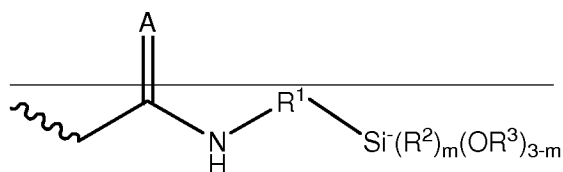
31. (Currently Amended) The method of claim 1, where the isocyanato alkoxysilane or isothiocyanato alkoxysilane are defined by the formula

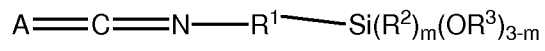


where A is oxygen or sulfur, A=C=N- is an isocyanate group, R¹ is a divalent organic group, each R² and R³ is independently a monovalent organic group, and m is an integer from 0 to 2.


~~where  is an anionically polymerized polymer, A is oxygen or sulfur, R¹ is a divalent organic group, each R² and R³ is a monovalent organic group, and m is an integer from 0 to 2.~~

32. (Currently Amended) The method of claim 21, where the isocyanatoalkoxysilane or isothiocyanatoalkoxysilane are defined by the formula

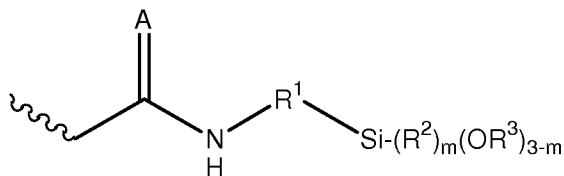




where A is oxygen or sulfur, A=C=N- is an isocyanate group, R¹ is a divalent organic group, each R² and R³ is independently a monovalent organic group, and m is an integer from 0 to 2.

~~where  is an anionically polymerized polymer, A is oxygen or sulfur, R¹ is a divalent organic group, each R² and R³ is a monovalent organic group, and m is an integer from 0 to 2.~~

33. (New) The method of claim 32, where said step of terminating the living polymer produces a functionalized polymer defined by the formula



where \sim is an anionically-polymerized polymer, A is oxygen or sulfur, R^1 is a divalent organic group, each R^2 and R^3 is a monovalent organic group, and m is an integer from 0 to 2.

34. (New) The method of claim 32, where said step of terminating includes a reaction with the isocyanate group of the isocyanate alkoxysilane or isothiocyanato alkoxysilane to form an amide linkage.